

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. A method of storing data, comprising:
receiving a sequence of data words of a first predetermined width and different respective formats either serially or in parallel;
splitting the data words of the received sequence to form new data words of a new sequence, the new data words having a second predetermined width;
packing the new data words consecutively in a token buffer of a second width without holes between the new data words;
unpacking the new data words to reproduce a new sequence of the new data words; and
using said new data words in a pipeline, which includes a parser, a portion of said new data words capable of being used by said parser to prepare said pipeline for processing at one or more stages, using a single bus.
2. The method of claim 1, further comprising:
writing a block of data from the token buffer to a random access memory device configured to store the words of the second width.
3. The method of claim 1, further comprising:
expanding out run length code in the new words.

4. An inverse modeler, comprising:
 - a data unpacker to unpack data words received from an input terminal either serially or in parallel to a different length format;
 - a data expander coupled to the data unpacker;
 - a data padder to pad data tokens received from the data expander; and
 - a pipeline, which includes a parser, for said new data words, a portion of said new data words capable of being used by said parser to prepare said pipeline for processing at one or more stages, using a single bus.
5. The inverse modeler of claim 4, wherein the data expander expands out run length codes into runs of zeros followed by a level in packed data.
6. The inverse modeler of claim 5, wherein the data padder pads the last word of expanded tokens.
7. The inverse modeler of claim 4, wherein the data unpacker deletes data between a flush signal and a block end signal.